



"Crafting Blockbusters: Data-Driven Strategies for Launching ABC's New Movie Studio"

PHASE 2 PROJECT

By: Group 7

OVERVIEW.

The film industry is a vibrant global market that plays a significant cultural and economic role.

As competition grows, more companies are entering the space of original video content creation.

To succeed in this highly competitive environment, new entrants must understand audience preferences, identify trending genres, and leverage data-driven insights.

Analyzing box office trends provides a roadmap for crafting engaging, profitable films that resonate with viewers, setting the foundation for long-term success in this creative and dynamic landscape.

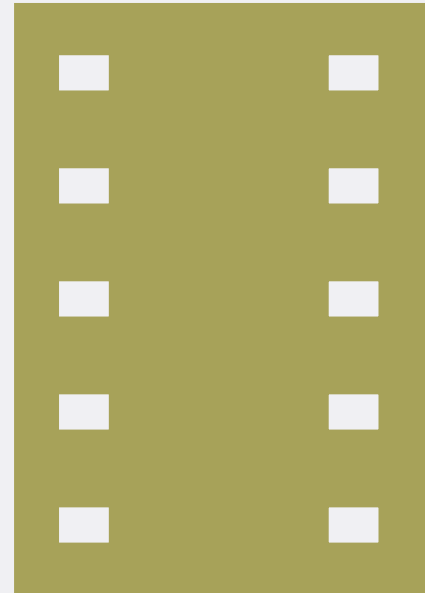
BUSINESS UNDERSTANDING.

- *ABC Company aims to capitalize on the growing trend of original video content creation by launching a new movie studio.*
- *However, the company lacks experience in filmmaking and requires a strategic approach to identify opportunities for success.*
- *By examining box office data, ABC can uncover patterns in audience behavior, profitable genres, and thematic preferences.*
- *This understanding will help the company align its production strategy with market demand, ensuring that its films have a competitive edge in attracting audiences and generating revenue.*



BUSINESS PROBLEM.

- *ABC Company has decided to establish a movie studio to compete with industry leaders in original video content creation.*
- *However, the company has no prior experience in film production.*
- *To address this, ABC must analyze current box office trends to determine which types of films are most successful.*
- *This analysis should be translated into actionable insights to guide the studio in deciding the genres, themes, and target audiences for its first slate of films, ensuring a strong market entry and competitive positioning.*





OBJECTIVES.

1. *Identify Popular Film Genres by popularity*
2. *Identify Popular Film Genres by popularity*
3. *Identify Emerging Trends and Audience Preferences*
4. *Identify months with highest profit*

DATA UNDERSTANDING.



- *After thoroughly analyzing the data in relation to the business problem and understanding key questions, we have selected the following datasets:*

1. *im.db.zip*
2. *tn.movie_budgets.csv.gz*
3. *bom.movie_gross.csv.gz*
4. *tmdb.movies.csv.gz*



DATA PREPARATION.

-
- *The four dataset will go through sanity check first that's is data cleaning, it includes:*
 1. *Converting some columns that are supposed to be numerical i.e production_budget, domestic_gross_y, worldwide_gross from object dtype to float dtype*
 2. *Check the null or missing values and fill them, and drop where need be*
 3. *Check and drop duplicates*
 4. *Check and drop outliers*
 5. *After the sanity check then i will merge the datasets 2 by 2 i.e will merge two datasets, then i will take the merged dataset and merge with the third dataset to have one dataset.*



DATA ANALYSIS.

Data analysis was conducted as follows:

- EDA
- Statistic Distribution
- Correlation Analysis
- Inferential Statistics
- Conclusion
- Recommendation



DATA FINDINGS.

The analysis reveals that higher production budgets strongly correlate with increased worldwide gross, profitability is highly variable and depends significantly on genre selection (with Music and Horror genres showing the highest profitability) and release timing (with January, July, and November as optimal months for maximizing returns). Additionally, while runtime and ratings have a limited impact on financial success, effective budget allocation and strategic genre choices are crucial for consistent performance.



DATA CONCLUSION.

The analysis indicates that movie profitability is influenced by several factors, including genre, release timing, and production budget. Genres such as Music and Horror stand out as particularly profitable, even though they often have lower budgets compared to other genres. Additionally, releasing films during certain months—specifically January, July, and November—tends to maximize box office returns, likely due to favorable seasonal demand. While higher production budgets are correlated with increased worldwide gross, profitability remains highly variable, indicating that simply spending more does not guarantee financial success. Audience ratings, measured as average rating, show weak correlation with runtime, suggesting that longer movies do not necessarily receive better ratings. Overall, financial success appears to be more closely tied to strategic budget allocation, genre selection, and release timing rather than factors like runtime or minor increases in user ratings.

A hand is shown interacting with a tablet screen that displays a bar chart. The bars are represented by white wireframe cubes of varying heights. The background is a blurred blue, suggesting a person in a blue shirt. The overall image is framed by a large white circle on the right side.

DATA RECOMMENDATION.

Prioritize Genre Selection for Profitability: Focus on Music and Horror genres, which show high profitability potential. These genres often resonate with niche audiences and can achieve strong box office performance without the need for excessive production budgets. This approach allows the studio to tap into reliable revenue streams while managing costs effectively.

Implement Seasonal Release Strategy: Schedule film releases during January, July, and November to optimize profitability by aligning with periods of higher consumer interest and lower competition in the box office. Tailoring release schedules to these strategic windows can help new releases capture a larger share of audience attention and boost revenue potential.

A hand is pointing at a bar chart displayed on a tablet screen. The chart consists of five white-outlined bars of increasing height from left to right. The background of the image is a blurred blue and white pattern.

DATA RECOMMENDATION.

Allocate Production Budgets Based on Expected ROI: While higher budgets can drive worldwide gross, focus on optimizing budget according to each film's potential return on investment (ROI), particularly for high-grossing genres. Avoid excessive spending on films where high budgets may not significantly enhance profitability. Instead, prioritize efficient budget use by carefully assessing the target audience, expected revenue, and genre-specific spending norms.

Explore Marketing and Audience Engagement Strategies for High-Return Genres: Since profitability varies widely, strengthen marketing strategies tailored to Music and Horror audiences. By effectively engaging fans through targeted advertising and promotional campaigns, the studio can maximize the visibility and appeal of these genres, enhancing box office performance and profitability.



DATA RECOMMENDATION.

Consider Audience Preference Metrics Over Runtime or Rating Increases: Given the weak correlation between runtime and user ratings, focus less on extending runtime for the sake of ratings and more on delivering quality content that aligns with audience preferences. This strategy can prevent unnecessary production costs tied to longer runtimes and instead channel resources into other value-adding areas, such as special effects or casting that enhance the movie's appeal.



THANK YOU.

